

REDACTED

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

Docket No. DG 23-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division
Winter 2023/2024 Cost of Gas

DIRECT TESTIMONY

OF

DEBORAH M. GILBERTSON,

ROBERT GARCIA,

AND

JAMES M. KING

September 15, 2023



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I. INTRODUCTION

Q. Please state your full name, business address, and position.

A. (DG) My name is Deborah M. Gilbertson. My business address is 15 Buttrick Road, Londonderry, New Hampshire. My title is Senior Manager, Energy Procurement.

(RG) My name is Robert Garcia. My business address is 15 Buttrick Road, Londonderry, New Hampshire. My title is Manager, Rates and Regulatory Affairs.

(JK) My name is James M. King. My business address is 15 Buttrick Road, Londonderry, New Hampshire. My title is Analyst II, Rates and Regulatory Affairs.

Q. By whom are you employed?

A. We are employed by Liberty Utilities Service Corp. (“LUSC”). LUSC provides local utility management, shared services, and support to Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty (“Liberty” or “the Company”) and its regulated water, wastewater, natural gas, and electric utility affiliates.

Q. On whose behalf are you testifying?

A. We are testifying on behalf of Liberty’s Keene Division.

Q. Ms. Gilbertson, please summarize your educational background and your business and professional experience.

A. I graduated from Bentley College in Waltham, Massachusetts, in 1996 with a Bachelor of Science in Management. In 1997, I was hired by Texas Ohio Gas where I was employed as a Transportation Analyst. In 1999, I joined Reliant Energy, located in Burlington,

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1 Massachusetts, as an Operations Analyst. From 2000 to 2003, I was employed by Smart
2 Energy as a Sr. Energy Analyst. In 2004, I joined Keyspan Energy Trading as a Sr.
3 Resource Management Analyst, and from 2008 to 2011, I was employed by National
4 Grid as a Lead Analyst in the Project Management Office. In 2011, I was hired by LUSC
5 as a Natural Gas Scheduler and was promoted to Manager of Retail Choice in 2012. In
6 2016, I was promoted to Sr. Manager of Energy Procurement. In this capacity, I provide
7 gas procurement services to Liberty.

8 **Q. Have you previously testified in regulatory proceedings before the New Hampshire**
9 **Public Utilities Commission (the “Commission”)?**

10 A. Yes, I have.

11 **Q. Mr. Garcia, please describe your educational and professional background and**
12 **training**

13 A. I have an Artium Baccalaureus (Bachelor of Arts) degree in Political Science and French
14 from Wabash College (Crawfordsville, Indiana) and a Master of Public Administration
15 degree from the School of Public and Environmental Affairs at Indiana University
16 (Bloomington, Indiana) with concentrations in Policy (Quantitative) Analysis and
17 International Affairs. I also obtained a Certificat De Langue Et Civilisation Française
18 from the Université de Paris – Sorbonne (Paris, France) and, as part of my graduate
19 studies, studied French and European government at the École Nationale
20 D’Administration (Paris, France).

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1 I was employed by ComEd from April 2001 to March 2023. I began my employment
2 with ComEd in the Regulatory Department as a Regulatory Specialist and moved on to
3 the positions of Senior Regulatory Specialist in 2004, Manager of Regulatory Strategies
4 and Solutions in 2008, and Director of Regulatory Strategy and Services in 2013 before
5 assuming my last position as Director of Regulatory Innovation & Initiatives in 2021.

6 Prior to joining ComEd, I worked for nearly nine years at the Illinois Commerce
7 Commission, beginning in 1992 as an intern in what was then the Office of Policy and
8 Planning and ending in 2001 as the senior policy advisor to a Commissioner. I initially
9 joined the Commission Staff through the James H. Dunn Memorial Fellowship program,
10 a one-year program sponsored by the Office of the Governor. Through this Fellowship, I
11 also held short-term positions in the Bureau of the Budget and the Governor's Legislative
12 Office.

13 **Q. Please describe your duties at LUSC.**

14 A. As Manager of Rates and Regulatory Affairs, I am primarily responsible for rate
15 administration and regulatory affairs for Liberty EnergyNorth and Liberty Utilities
16 (Granite State Electric) Corp.

17 **Q. Mr. Garcia, have you previously testified in regulatory proceedings before the New**
18 **Hampshire Public Utilities Commission (the "Commission")?**

19 A. No, I have not testified before the New Hampshire Public Utilities Commission.
20 However, I have testified on several occasions before the Illinois Commerce
21 Commission.

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1 **Q. Mr. King, please state your full name and business address and position.**

2 A. My name is James M. King. My business address is 15 Buttrick Road, Londonderry,
3 New Hampshire. I am an Analyst II for Rates and Regulatory Affairs for LUSC, which
4 provides services to EnergyNorth and Granite State Electric.

5 **Q. Please describe your professional and educational background.**

6 A. I joined Liberty in September 2022. Prior to joining Liberty, I was employed by the
7 Massachusetts Department of Public Utilities from 2014 through 2022. I held positions
8 as an Economist III and Economist II in the Rates and Revenue Requirements Division
9 where I was responsible for the review and analysis of base distribution rate cases, as
10 well as other rate reconciliation mechanisms presented to the Department from
11 Massachusetts' gas, electric, and water companies. I graduated from Franklin and
12 Marshall College with a Bachelor of Social Science in Government and Economics.

13 **Q. Have you previously testified in regulatory proceedings before the Commission?**

14 A. Yes, I have testified on multiple occasions before this Commission.

15 **Q. What is the purpose of your testimony?**

16 A. The purpose of our testimony is to explain the Company's proposed cost of gas rates for
17 its Keene Division for the 2023/2024 winter (peak) period to be effective beginning on
18 November 1, 2023. Our testimony will also address bill comparisons and other items
19 related to the winter period.

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1 **II. WINTER 2023/2024 COST OF GAS FACTOR**

2 **Q. What is the firm winter cost of gas rate?**

3 A. The cost of gas factor allows the company to adjust its rates for firm gas sales in order to
4 recover the cost of gas purchased or produced. The winter period cost of gas rates
5 calculated in this filing are to be in effect for the winter heating period, defined as the
6 period from November 1 through April 30. The terms and conditions for the Keene
7 Division cost of gas clause are explained in the Company Tariff No. 11 on pages 32 and
8 33.

9 **Q. What is the proposed firm winter cost of gas rate?**

10 A. The Company proposes a firm cost of gas rate of \$1.4007 per therm for the Keene
11 Division as shown on Illustrative Eleventh Revised Page 97.

12 **Q. Please explain the calculation of the Cost of Gas rates on Illustrative Eleventh**
13 **Revised Page 97 of the tariff.**

14 A. Illustrative Eleventh Revised Page 97 contains the calculation of the 2023/2024 Winter
15 Period Cost of Gas Rate (“COG”) and summarizes the Company's forecast of propane
16 and compressed natural gas (“CNG”) sales and propane and CNG costs. The product of
17 these forecasts results in a total expected cost of the gas sendout from November 1, 2023,
18 through April 30, 2024, of \$1,819,133.

19 To derive the Total Anticipated Cost of Gas, which is used to calculate the COG, the
20 following adjustments are made to the estimated cost of gas sendout:

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- 1) The prior period over-collection of \$164,514 is added from the anticipated cost of gas sendout; and
- 2) Interest of (\$7,538) is added to the anticipated cost of gas sendout for the period of May 2023 through October 2023. Schedule H shows this forecasted interest calculation for the period May 2023 through April 2024. Interest is accrued using the monthly prime lending rate as reported by the Federal Reserve Statistical Release of Selected Interest Rates.

The Non-Fixed Price Option (“Non-FPO”) cost of gas rate of \$1.4007 per therm was calculated by dividing the Total Anticipated Cost of Gas of \$1,647,081 by the Projected Gas Sales of 1,175,936 therms. The Fixed Price Option (“FPO”) rate of \$1.4207 per therm was established by adding a \$0.02 per therm premium to the Non-FPO rate. The information presented on this tariff page is supported by Schedules A through J, which are described later in this testimony.

Q. Please describe Schedule A.

A. Schedule A converts the gas volumes and unit costs from gallons to therms which is used in Schedule F, inventory & weighted average cost calculation. The 1,234,457 therms represent sendout as detailed on Schedule B, line 3 and line 9. The blended unit cost of those supplies is [REDACTED] per therm which represents the weighted average cost per therm for the winter period gas sendout as detailed on Schedule F, line 55.

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1 **Q. What is Schedule B?**

2 A. Schedule B presents the anticipated (over)/under collection calculation for the winter
3 2023/2024 period based on the forecasted volumes, the cost of gas, and applicable
4 interest amounts. The forecasted total propane sendout on line 3, plus total CNG sendout
5 on line 9, is the sum of the weather-normalized 2023/2024 winter period firm sendout
6 and company use. The forecasted Firm Sales on line 1 represent weather-normalized
7 202/2024 winter period firm sales. The weather normalization calculations for sendout
8 and sales are found in Schedules I and J, respectively.

9 **Q. Are CNG demand charges included in this filing?**

10 A. Yes, CNG demand charges are included in Schedule B on line 12.

11 Schedule B, line 12, includes 75% of the 2023/2024 demand charges. These charges are
12 [REDACTED] per month or [REDACTED] for the season and represent the portion attributable to the
13 winter period.

14 **Q. Are incremental costs for prior winter periods related to the use of CNG (instead of
15 propane) included in this filing?**

16 A. No. Prior winter period incremental costs are not included in this filing. The Winter
17 period 2022/2023 incremental costs are accounted for in the reconciliation of the Winter
18 period. The actual Winter period 2022/2023 experience resulted in CNG costs, which
19 were incrementally greater by \$10,974. Per Section 7.1 of the Settlement Agreement in
20 Docket No. DG 20-105, the Company included a refund of \$5,487 as the Company is

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1 allowed to recover only one-half of the incrementally higher CNG supply cost. The
2 calculation can be found on Schedule P.

3 **Q. What incremental costs are included in this filing?**

4 A. The projected net incremental costs included in this filing are a refund of \$3,110, based
5 on an incremental CNG cost of \$6,221, of which the Company is allowed to recover one-
6 half. The projected CNG incremental costs are calculated on Schedule N for use on
7 Schedule B, line 13.

8 **Q. Are unaccounted-for gas volumes included in the filing?**

9 A. Yes. Unaccounted-for gas is included in the firm sendout on Schedule B, lines 1 and 9.
10 The Company actively monitors its level of unaccounted-for volumes, which amounted to
11 0.64% for the twelve months ended June 30, 2023.

12 **Q. Please describe Schedules C, D, and E.**

13 A. Schedule C presents the calculation of the total forecasted cost of gas purchases in the
14 2023/2024 winter period, segregated by Propane Purchasing Stabilization Plan (“PPSP”)
15 purchases, available storage deliveries from Liberty’s Amherst facility, CNG deliveries,
16 and spot purchases.

17 Schedule D presents the structure of PPSP pre-purchases for the winter period, monthly
18 average rates for the pre-purchases, and the resulting weighted average contract price for
19 the winter period as used in Schedule C, line 5.

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1 Schedule E presents the forecasted market spot prices of propane. Column 1 of the
2 Schedule represents the Mont Belvieu propane futures quotations as of September 6,
3 2023, followed by projected broker fees, pipeline fees, PERC fees, supplier charges, and
4 trucking charges. Together, the pricing and fees make up the expected cost of spot
5 propane purchases as represented in Schedule C, line 32.

6 **Q. Please describe the Propane Purchasing Stabilization Plan (PPSP).**

7 A. The PPSP, as approved in Order No. 24,617 (Apr. 28, 2006) in Docket No. DG 06-037,
8 was again implemented for the winter of 2023/2024. As shown on Schedule D, the
9 Company pre-purchased 700,000 gallons of propane between April and September at a
10 weighted average price of \$1.1516 per gallon (\$1.2586 per therm), inclusive of broker,
11 pipeline, Propane Education & Research Council (“PERC”), and trucking charges in
12 effect at the time of the supplier’s bid.

13 **Q. Have the pre-purchased volumes in the PPSP changed since 2022/2023?**

14 A. No. The volume remains at 700,000 gallons or 640,500 therms. The Keene Division
15 maintains a pre-purchase hedge of approximately 61%.

16 **Q. How was the cost of CNG purchases determined?**

17 A. The CNG costs are shown in Schedule C, lines 20 through 27. These costs reflect the
18 contractual agreement between the Company and its supplier, Xpress Natural Gas, LLC.

19 **Q. Please describe Schedule F.**

20 A. Schedule F contains the calculation of the weighted average cost of inventory for each
21 month through April 2024. The unit cost of projected gas to be sent out each month

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utilizes this weighted average inventory cost, which is inclusive of all PPSP purchases, spot purchases, Amherst storage withdrawals, and CNG deliveries. Note that the CNG deliveries are shown in separate columns from the propane-weighted cost but are included in the average winter rate, which is established on line 55 of Schedule F. This mix of supply purchases is also itemized on Schedule C.

Q. What is shown on Schedule G?

A. Schedule G shows the over-collected balance for the prior winter 2022/2023 period, including interest calculated in a manner consistent with prior years. The over-collected balance of \$123,836 is shown on line 49.

Q. How is the information in Schedule H represented in the cost of gas calculation?

A. Schedule H presents the interest calculation and adjustments on (over)/under-collected balances through April 2023. The prior period over-collection of \$114,671 plus the adjustments total \$164,514, the anticipated balance on October 31, 2023, plus interest of (\$7,538), for a total under-collection from winter 2022/2023 of \$172,052.

III. FIXED PRICE OPTION PROGRAM

Q. Please describe the FPO program that will be in place for the winter period.

A. The Company will offer the FPO program for the upcoming winter period to provide customers the opportunity to lock in their cost of gas rate. Enrollment in the program is limited to 50% of forecasted winter sales, with allotments made available to both residential and commercial customers on a first-come, first-served basis. The Company is forecasting that 13.04% of total sales volumes will enroll in the FPO program. The

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1 13.04% is the five-year average FPO participation rate from winter 2017/2018 through
2 the winter of 2021/2022.

3 **Q. Will a premium be applied to the FPO rate?**

4 A. Yes. As approved in Order No. 24,516 (Sept. 19, 2005) in Docket No. DG 05-144, the
5 Company has added a \$0.02 per therm premium to the \$1.4007 per therm Non-FPO cost
6 of gas rate, to derive the FPO rate of \$1.4207 per therm.

7 **Q. How will customers be notified of the availability of the FPO program?**

8 A. A letter will be mailed to all customers by October 1 advising them of the program, the
9 FPO rate, and the procedure to enroll.

10 **IV. COST OF GAS RATE AND BILL COMPARISONS**

11 **Q. How do the proposed Winter 2023/2024 cost of gas rates compare with the previous**
12 **winter's rates?**

13 A. The proposed Non-FPO COG rate of \$1.4007 per therm is a decrease of \$0.7209 or 34%
14 from the winter 2022/2023 approved rate of \$2.1216 per therm, in Docket No. DG 22-
15 057, which approved interim Cost of Gas rates.

16 The proposed FPO rate is \$1.4207 per therm, representing a decrease of \$0.7209 per
17 therm or 34% from last winter's interim fixed rate of \$2.1416.

18 **Q. What are the primary reasons for the change in rates?**

19 A. The main reasons for the \$0.7209 decrease are due to the over-collection balance and a
20 decrease in supply costs based on decreasing market futures.

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1 **Q. What is the impact of the Winter 2023/2024 COG rate on the typical residential heat**
2 **and hot water customer participating in the FPO program?**

3 A. As shown on Schedule K-1, Column 7, lines 24 and 25, the typical residential heat and
4 hot water FPO customer would experience a decrease of \$322.23 or 33.7% in the gas
5 component of their bills compared to the prior winter period.

6 **Q. What is the impact of the Winter 2023/2024 COG rate on the typical residential heat**
7 **and hot water customer choosing the Non-FPO program?**

8 A. As shown on Schedule K-2, Column 7, lines 24 and 25, the typical residential heat and
9 hot water Non-FPO customer is projected to see a decrease of \$289.86 or 31.6% in the
10 gas component of their bills compared to the prior winter period.

11 **Q. Please describe the impact of the Winter 2022/2023 COG rate on the typical**
12 **commercial customer compared to the prior winter period.**

13 A. Schedule L-1 illustrates that the typical commercial FPO customer would see a \$1,240.68
14 or 33.7% decrease in the gas component of their bill and a 25.5% decrease in their total
15 bill. Schedule L-2 shows that the typical commercial Non-FPO customer would see
16 decreases of \$1,117.24 or a 31.7% decrease in the gas component of their bill and a
17 23.7% decrease in their total bill.

18 **V. OTHER ITEMS**

19 **Q. What is the status of CNG currently?**

20 A. The Company began serving customers with CNG in October 2019. The service territory
21 for CNG is exclusive to the Monadnock Marketplace and several customers on Key Road

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1 at this time. Xpress Natural Gas (XNG) is currently the Supplier; however, this contract
2 will expire on June 30, 2024. The Company will be sending a request for proposals for a
3 new CNG contract in mid-September. The new contract will start July 1, 2024. The
4 Company will otherwise follow the guidelines from the most recent rate case settlement
5 and orders governing any further conversion of the Keene Division to natural gas.

6 **Q. What is the price differential between the cost of spot propane and the cost of CNG?**

7 A. For the upcoming peak period, spot propane is [REDACTED] cents per therm less expensive than
8 CNG. The calculation is Spot Purchases cost per therm found on Schedule C, line 31 less
9 the CNG Deliveries cost per therm found on Schedule C, line 24.

10 **Q. Does that comparison include the CNG demand charge?**

11 A. Yes.

12 **Q. Has there been any change to the allocation of the demand charge between the**
13 **summer and winter as compared to last year?**

14 A. No. The Company has allocated 75% of the demand charge to the winter period and 25%
15 of the demand charge to the summer period. In Order No. 26,505 (July 30, 2021), the
16 Commission approved the Settlement Agreement in the Company's distribution service
17 rate case, which adjusted this allocation to 75% in the winter period and 25% in the
18 summer period.

19 **Q. Can you comment on energy prices for the upcoming heating season?**

20 A. Compared to last year's heating season, prices have decreased considerably. At this time
21 last year, the 2022/2023 blended cost/price of gas was projected to be \$1.71 per therm,

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1 but now the projected cost for winter 2023/2024 is projected to be \$1.30. This represents
2 almost a 25% reduction in cost. The Company has been and continues to seek the lowest
3 cost solutions for both propane and CNG by locking in supply early using physical
4 hedging, refilling storage in off-peak periods, and using price optionality as outlined in
5 our CNG contract to obtain the least cost option in both winter and summer.

6 **Q. Please describe how the Company will meet its 7-day on-site storage requirement.**

7 A. The Company has a net storage capacity at its plant in Keene of approximately 75,000
8 gallons of propane. Additionally, Liberty has approximately 129,800 gallons of propane
9 at the Amherst storage facility located approximately 50 miles from the Keene plant.
10 This storage facility is shared between the Keene Division and EnergyNorth. In addition,
11 the Company will arrange its standard trucking commitment with Northern Gas
12 Transport, Inc. for transportation from this storage facility to the Keene plant. Further,
13 the Company has contracted for CNG deliveries to provide service to a section of its
14 system. The firm trucking arrangement coupled with onsite CNG trailers is more than
15 enough to meet the 7-day demand requirement for the 2023/2024 peak period.

16 **Q. Does this conclude your testimony?**

17 A. Yes.

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

COST OF GAS RATE FILING - DOCKET NO. DG 23-XXX

WINTER PERIOD 2023 – 2024

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Firm Rate Schedule**23 FIRM RATE SCHEDULES - KEENE CUSTOMERS****II RATE SCHEDULES**

	Rates Effective November 1, 2023 - April 30, 2024 Winter Period				Rates Effective September 1, 2023 - October 31, 2023 Summer Period			
	<u>Delivery Charge</u>	<u>Cost of Gas Rate Page 97</u>	<u>LDAC Page 101</u>	<u>Total Rate</u>	<u>Delivery Charge</u>	<u>Cost of Gas Rate Page 93</u>	<u>LDAC Page 101</u>	<u>Total Rate</u>
<u>Residential Non Heating - R-1</u>								
Customer Charge per Month per Meter	\$ 15.39			\$ 15.39	\$ 15.39			\$ 15.39
All therms	\$ 0.4614	\$ 1.4007	\$ 0.1180	\$ 1.9801	\$ 0.4614	\$ 1.1464	\$ 0.1180	\$ 1.7258
<u>Residential Heating - R-3</u>								
Customer Charge per Month per Meter	\$ 15.39			\$ 15.39	\$ 15.39			\$ 15.39
Therms in the first block per month at	\$ 0.6167	\$ 1.4007	\$ 0.1180	\$ 2.1354	\$ 0.6167	\$ 1.1464	\$ 0.1180	\$ 1.8811
<u>Residential Heating - R-4</u>								
Customer Charge per Month per Meter	\$ 8.47			\$ 8.47	\$ 15.39			\$ 15.39
Therms in the first block per month at	\$ 0.3392	\$ 0.7704	\$ 0.1180	\$ 1.2276	\$ 0.6167	\$ 1.1464	\$ 0.1180	\$ 1.8811
<u>Commercial/Industrial - G-41</u>								
Customer Charge per Month per Meter	\$ 60.81			\$ 60.81	\$ 60.81			\$ 60.81
Size of the first block	100 Therms				20 Therms			
Therms in the first block per month at	\$ 0.4928	\$ 1.4007	\$ 0.0957	\$ 1.9892	\$ 0.4928	\$ 1.1464	\$ 0.0957	\$ 1.7349
All therms over the first block per month at	\$ 0.3390	\$ 1.4007	\$ 0.0957	\$ 1.8354	\$ 0.3390	\$ 1.1464	\$ 0.0957	\$ 1.5811
<u>Commercial/Industrial - G-42</u>								
Customer Charge per Month per Meter	\$ 182.42			\$ 182.42	\$ 182.42			\$ 182.42
Size of the first block	1000 Therms				400 Therms			
Therms in the first block per month at	\$ 0.4485	\$ 1.4007	\$ 0.0957	\$ 1.9449	\$ 0.4485	\$ 1.1464	\$ 0.0957	\$ 1.6906
All therms over the first block per month at	\$ 0.3063	\$ 1.4007	\$ 0.0957	\$ 1.8027	\$ 0.3063	\$ 1.1464	\$ 0.0957	\$ 1.5484
<u>Commercial/Industrial - G-43</u>								
Customer Charge per Month per Meter	\$ 781.17			\$ 781.17	\$ 781.17			\$ 781.17
All therms over the first block per month at	\$ 0.2766	\$ 1.4007	\$ 0.0957	\$ 1.7730	\$ 0.1344	\$ 1.1464	\$ 0.0957	\$ 1.3765
<u>Commercial/Industrial - G-51</u>								
Customer Charge per Month per Meter	\$ 60.87			\$ 60.87	\$ 60.87			\$ 60.87
Size of the first block	100 Therms				100 Therms			
Therms in the first block per month at	\$ 0.2970	\$ 1.4007	\$ 0.0957	\$ 1.7934	\$ 0.2970	\$ 1.1464	\$ 0.0957	\$ 1.5391
All therms over the first block per month at	\$ 0.1983	\$ 1.4007	\$ 0.0957	\$ 1.6947	\$ 0.1983	\$ 1.1464	\$ 0.0957	\$ 1.4404
<u>Commercial/Industrial - G-52</u>								
Customer Charge per Month per Meter	\$ 182.26			\$ 182.26	\$ 182.26			\$ 182.26
Size of the first block	1000 Therms				1000 Therms			
Therms in the first block per month at	\$ 0.2560	\$ 1.4007	\$ 0.0957	\$ 1.7524	\$ 0.1891	\$ 1.1464	\$ 0.0957	\$ 1.4312
All therms over the first block per month at	\$ 0.1749	\$ 1.4007	\$ 0.0957	\$ 1.6713	\$ 0.1132	\$ 1.1464	\$ 0.0957	\$ 1.3553
<u>Commercial/Industrial - G-53</u>								
Customer Charge per Month per Meter	\$ 805.75			\$ 805.75	\$ 805.75			\$ 805.75
All therms over the first block per month at	\$ 0.1790	\$ 1.4007	\$ 0.0957	\$ 1.6754	\$ 0.0907	\$ 1.1464	\$ 0.0957	\$ 1.3328
<u>Commercial/Industrial - G-54</u>								
Customer Charge per Month per Meter	\$ 806.42			\$ 806.42	\$ 806.42			\$ 806.42
All therms over the first block per month at	\$ 0.0682	\$ 1.4007	\$ 0.0957	\$ 1.5646	\$ 0.0386	\$ 1.1464	\$ 0.0957	\$ 1.2807

DATED: October XX, 2023

ISSUED BY: /s/Neil Proudman

Neil Proudman

EFFECTIVE: November 1, 2023

TITLE: President

NHPUC NO. 11 GAS
LIBERTY UTILITIES

~~Illustrative Thirty-first~~ Revised Page 88
Superseding ~~Thirtieth-Twenty-ninth~~ Revised Page 88
Firm Rate Schedule

23 FIRM RATE SCHEDULES - KEENE CUSTOMERS

II RATE SCHEDULES

Rates Effective November 1, 2023 - April 30, 2024 Winter Period					Rates Effective September 1, 2023 - October 31, 2023 Summer Period				
	Delivery Charge	Cost of Gas Rate Page 97	LDAC Page 101	Total Rate		Delivery Charge	Cost of Gas Rate Page 93	LDAC Page 101	Total Rate
Residential Non Heating - R-1									
Customer Charge per Month per Meter	\$ 15.39			\$ 15.39		\$ 15.39			\$ 15.39
All therms	\$ 0.4614	\$ 1.4007	\$ 0.1180	\$ 1.9801		\$ 0.4614	\$ 1.1464	\$ 0.1180	\$ 1.7258
		\$ 2.6520	\$ 0.1113	\$ 3.2247					
Residential Heating - R-3									
Customer Charge per Month per Meter	\$ 15.39			\$ 15.39		\$ 15.39			\$ 15.39
Therms in the first block per month at	\$ 0.6167	\$ 1.4007	\$ 0.1180	\$ 2.1354		\$ 0.6167	\$ 1.1464	\$ 0.1180	\$ 1.8811
		\$ 2.6520	\$ 0.1113	\$ 3.3800					
Residential Heating - R-4									
Customer Charge per Month per Meter	\$ 8.47			\$ 8.47		\$ 15.39			\$ 15.39
Therms in the first block per month at	\$ 0.3392	\$ 0.7704	\$ 0.1180	\$ 1.2276		\$ 0.6167	\$ 1.1464	\$ 0.1180	\$ 1.8811
		\$ 1.4586	\$ 0.1113	\$ 1.9091					
Commercial/Industrial - G-41									
Customer Charge per Month per Meter	\$ 60.81			\$ 60.81		\$ 60.81			\$ 60.81
Size of the first block	100 Therms					20 Therms			
Therms in the first block per month at	\$ 0.4928	\$ 1.4007	\$ 0.0957	\$ 1.9892		\$ 0.4928	\$ 1.1464	\$ 0.0957	\$ 1.7349
		\$ 2.6520	\$ 0.0890	\$ 3.2338					
All therms over the first block per month at	\$ 0.3390	\$ 1.4007	\$ 0.0957	\$ 1.8354		\$ 0.3390	\$ 1.1464	\$ 0.0957	\$ 1.5811
		\$ 2.6520	\$ 0.0890	\$ 3.0800					
Commercial/Industrial - G-42									
Customer Charge per Month per Meter	\$ 182.42			\$ 182.42		\$ 182.42			\$ 182.42
Size of the first block	1000 Therms					400 Therms			
Therms in the first block per month at	\$ 0.4485	\$ 1.4007	\$ 0.0957	\$ 1.9449		\$ 0.4485	\$ 1.1464	\$ 0.0957	\$ 1.6906
		\$ 2.6520	\$ 0.0890	\$ 3.1895					
All therms over the first block per month at	\$ 0.3063	\$ 1.4007	\$ 0.0957	\$ 1.8027		\$ 0.3063	\$ 1.1464	\$ 0.0957	\$ 1.5484
		\$ 2.6520	\$ 0.0890	\$ 3.0473					
Commercial/Industrial - G-43									
Customer Charge per Month per Meter	\$ 781.17			\$ 781.17		\$ 781.17			\$ 781.17
All therms over the first block per month at	\$ 0.2766	\$ 1.4007	\$ 0.0957	\$ 1.7730		\$ 0.1344	\$ 1.1464	\$ 0.0957	\$ 1.3765
		\$ 2.6520	\$ 0.0890	\$ 3.0176					
Commercial/Industrial - G-51									
Customer Charge per Month per Meter	\$ 60.87			\$ 60.87		\$ 60.87			\$ 60.87
Size of the first block	100 Therms					100 Therms			
Therms in the first block per month at	\$ 0.2970	\$ 1.4007	\$ 0.0957	\$ 1.7934		\$ 0.2970	\$ 1.1464	\$ 0.0957	\$ 1.5391
		\$ 2.6520	\$ 0.0890	\$ 3.0380					
All therms over the first block per month at	\$ 0.1983	\$ 1.4007	\$ 0.0957	\$ 1.6947		\$ 0.1983	\$ 1.1464	\$ 0.0957	\$ 1.4404
		\$ 2.6520	\$ 0.0890	\$ 2.9393					
Commercial/Industrial - G-52									
Customer Charge per Month per Meter	\$ 182.26			\$ 182.26		\$ 182.26			\$ 182.26
Size of the first block	1000 Therms					1000 Therms			
Therms in the first block per month at	\$ 0.2560	\$ 1.4007	\$ 0.0957	\$ 1.7524		\$ 0.1891	\$ 1.1464	\$ 0.0957	\$ 1.4312
		\$ 2.6520	\$ 0.0890	\$ 2.9970					
All therms over the first block per month at	\$ 0.1749	\$ 1.4007	\$ 0.0957	\$ 1.6713		\$ 0.1132	\$ 1.1464	\$ 0.0957	\$ 1.3553
		\$ 2.6520	\$ 0.0890	\$ 2.9159					
Commercial/Industrial - G-53									
Customer Charge per Month per Meter	\$ 805.75			\$ 805.75		\$ 805.75			\$ 805.75
All therms over the first block per month at	\$ 0.1790	\$ 1.4007	\$ 0.0957	\$ 1.6754		\$ 0.0907	\$ 1.1464	\$ 0.0957	\$ 1.3328
		\$ 2.6520	\$ 0.0890	\$ 2.9200					
Commercial/Industrial - G-54									
Customer Charge per Month per Meter	\$ 806.42			\$ 806.42		\$ 806.42			\$ 806.42
All therms over the first block per month at	\$ 0.0682	\$ 1.4007	\$ 0.0957	\$ 1.5646		\$ 0.0386	\$ 1.1464	\$ 0.0957	\$ 1.2807
		\$ 2.6520	\$ 0.0890	\$ 2.8092					

DATED: ~~October XX, 2023~~ August 24, 2023

ISSUED BY: /s/Neil Proudman

EFFECTIVE: ~~November 1, 2023~~ September 1, 2023

TITLE: President

Authorized by NHPUC Order No. ~~XX,XXX26,807~~ dated ~~October XX~~ April 25, 2023, in Docket No. DG ~~23-XXX23-034~~

NHPUC NO. 11 GAS
LIBERTY UTILITIES

Illustrative Eleventh Revised Page 97
Superseding Tenth Revised Page 97
Winter Cost of Gas

32 CALCULATION OF FIRM SALES AND FIXED WINTER PERIOD COST OF GAS RATE - KEENE CUSTOMERS

Calculation of the Cost of Gas Rate

Period Covered: Winter Period November 1, 2023 through April 30, 2024

Projected Gas Sales - therms 1,175,936

Total Calculated Cost of Gas Sendout	\$	1,597,618
Indirect Costs from DG 20-105		208,129
Return on Inventory		17,677
Interest		(4,291)
Total Anticipated Cost of Gas Sendout	\$	1,819,133

Add:	Prior Period Deficiency Uncollected	\$	-
	Interest		-

Deduct:	Prior Period Excess Collected	\$ (164,514)
	Interest	(7,538)

Prior Period Adjustments and Interest	\$	(172,052)
---------------------------------------	----	-----------

Total Anticipated Cost	\$	1,647,081
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<u>Cost of Gas Rate</u>	Excluding Gas Assistance Program	Gas Assistance Program
Non-Fixed Price Option Cost of Gas Rate - Beginning Period (per therm)	\$ 1.4007	\$ 0.7704
Fixed Price Option Cost of Gas Rate (per therm) November 2023-April 2024	\$ 1.4207	\$ 0.7814
Pursuant to tariff section 17(d), the Company may adjust the approved cost of gas rate upward on a monthly basis to the following rate:		
Maximum Cost of Gas Rate - Non-Fixed Price Option (per therm)	\$ 1.7509	\$ 0.9630

DATED: October XX, 2023

ISSUED BY: /s/Neil Proudman
Neil Proudman

EFFECTIVE: November 1, 2023

TITLE: President

Authorized by NHPUC Order No. XX,XXX dated October XX, 2023, in Docket No. DG 23-XXX

NHPUC NO. 11 GAS
LIBERTY UTILITIES

~~Illustrative EleventhTenth~~ Revised Page 97
Superseding ~~TenthNinth~~ Revised Page 97
Winter Cost of Gas

32 CALCULATION OF FIRM SALES AND FIXED WINTER PERIOD COST OF GAS RATE - KEENE CUSTOMERS

Calculation of the Cost of Gas Rate

Period Covered: ~~Winter Period November 1, 2023 through April 30, 2024~~
~~Winter Period November 1, 2022 through April 30, 2023~~

Projected Gas Sales - therms	1,175,936	1,125,173
Total Calculated Cost of Gas Sendout	\$ 1,597,618	\$ 1,965,931
Indirect Costs from DG 20-105	208,129	208,129
Return on Inventory	17,677	15,323
Interest	(4,291)	2,463
Total Anticipated Cost of Gas Sendout	\$ 1,819,133	\$ 2,191,846

Add: ~~Winter 2021-2022 Prior Period~~ Deficiency Uncollected \$ - \$ 192,310
Interest - 3,065

Deduct: Prior Period Excess Collected \$ (164,514) \$ —
Interest (7,538) —

Prior Period Adjustments and Interest \$ (172,052) \$ 195,375

Total Anticipated Cost \$ 1,647,081 \$ 2,387,221

Cost of Gas Rate	Excluding Gas Assistance Program	Gas Assistance Program	Excluding Gas Assistance- Program	Gas Assistance- Program
Non-Fixed Price Option Cost of Gas Rate - Beginning Period (per therm)	\$ 1.4007	\$ 0.7704	\$ 2.1216	\$ 1.1669
Change in rate due to revised under/over recovery projection - December 1, 2022	\$ -	\$ -	\$ (0.0098)	\$ (0.0054)
Change in rate due to revised under/over recovery projection - January 1, 2023	\$ -	\$ -	\$ (0.2908)	\$ (0.1649)
Change in rate due to revised under/over recovery projection - March 1, 2023	\$ -	\$ -	\$ 0.2002	\$ 0.1101
Change in rate due to revised under/over recovery projection - April 1, 2023	\$ -	\$ -	\$ 0.6398	\$ 0.3519
Revised Non-Fixed Price Option Cost of Gas Rate - Effective April 1, 2023			\$ 2.6520	\$ 1.4586
Fixed Price Option Cost of Gas Rate (per therm) November 2023 2022 -April 2024 2023	\$ 1.4207	\$ 0.7814	\$ 2.1416	\$ 1.1779

Pursuant to tariff section 17(d), the Company may adjust the approved cost of gas rate upward on a monthly basis to the following rate:

Maximum Cost of Gas Rate - Non-Fixed Price Option (per therm) \$ 1.7509 \$ 0.9630 \$ 2.6520 \$ 1.4586

DATED: ~~October XX, 2023~~ ~~March 24, 2023~~

ISSUED BY: /s/Neil Proudman

EFFECTIVE: ~~November 1, 2023~~ ~~April 1, 2023~~

TITLE: Neil Proudman
President

Authorized by NHPUC Order No. ~~XX.XXX26,716~~ dated October ~~XX34, 2023~~ ~~2022~~, in Docket No. DG ~~23-XXX22-057~~

REDACTED
SCHEDULE A
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

CONVERSION OF COSTS - GALLONS TO THERMS
WINTER PERIOD 2023 – 2024

	(1)	(2)	(3)	(4)	(5)	(6)
			<u>VOLUMES</u>		<u>UNIT COST</u>	
	<u>UNIT</u>	<u>CONVERSION FACTOR</u>	<u>GALLONS</u>	<u>THERMS</u>	<u>PER GALLON</u>	<u>PER THERM</u>
1 GAS FROM PROPANE	GALLONS	0.91502			\$1.1671	\$1.2755
2 GAS FROM CNG	THERMS	N/A	N/A		N/A	
3 TOTAL				1,234,457		

REDACTED
SCHEDULE B
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

CALCULATION OF COST OF GAS RATE
SUPPLY / DEMAND BALANCE
WINTER PERIOD 2023 – 2024

	PRIOR	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	TOTAL	REFERENCE
PROPANE COSTS									
1 PROPANE FIRM SENDOUT (therms)									Sch. I Col. 138 - Ln 2
2 COMPANY USE (therms)									Sch I Col. M
3 TOTAL PROPANE SENDOUT (therms)									Ln 1 + Ln 2
4 COST PER THERM (WACOG)	\$1.2128	\$1.2471	\$1.2602	\$1.2747	\$1.3607	\$1.3134			Sch F, Col. 2
5 TOTAL CALCULATED COST OF PROPANE	\$157,484	\$248,172	\$277,287	\$250,872	\$217,159	\$127,631	\$1,278,605		Ln 3 * Ln 4
6 INDIRECT COSTS FROM DG 20-105	\$34,688	\$34,688	\$34,688	\$34,688	\$34,688	\$34,688	\$208,129		DG 20-105, Section 11.2 (\$206,248 + 1,881)
7 PROPANE ADJUSTMENTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
8 TOTAL COST OF PROPANE	\$192,172	\$282,860	\$311,975	\$285,560	\$251,847	\$162,319	\$1,486,734		Ln 5 + Ln 6 + Ln 7
CNG COSTS									
9 CNG SENDOUT (therms)									Sch C, Ln 20
10 COST PER THERM (WACOG)									Sch C, Ln 21
11 TOTAL CALCULATED COST OF CNG									Ln 9 * Ln 10
12 CNG DEMAND CHARGES									Sch C, Ln 26
13 PROJECTED INCREMENTAL COSTS Winter 2023-2024									Sch. N Ln. 25
14 NET INCREMENTAL COSTS									Ln 13 + Ln 14
15 TOTAL CNG COSTS									Ln 11 + Ln 12 + Ln 13
16 ACCOUNTING ADJUSTMENT	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
17 FPO PREMIUM	\$391	\$605	\$675	\$606	\$496	\$294	\$3,067		Ln 33 * .02
18 TOTAL COSTS OF GAS									Ln 8 + Ln 15 +Ln 16 + Ln 17
19 RETURN ON INVENTORY	\$2,946	\$2,946	\$2,946	\$2,946	\$2,946	\$2,946	\$ 17,677		Company calculation
REVENUES									
20 BILLED FPO SALES (therms)	0	0	0	0	0	0	0		
21 COG FPO RATE	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
23 BILLED FPO REVENUE - CURRENT MONTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
24 BILLED NON-FPO SALES PRIOR MONTH (therms)	0	0	0	0	0	0	0		
25 COG NON-FPO RATE PRIOR MONTH	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
26 BILLED FPO REVENUE - PRIOR MONTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
27 BILLED NON-FPO SALES CURRENT MONTH (therms)	149,904	232,044	258,700	232,508	190,073	112,707	1,175,936		Sch. J
28 COG NON-FPO RATE CURRENT MONTH	\$1.4007	\$1.4007	\$1.4007	\$1.4007	\$1.4007	\$1.4007	\$1.4007		(Ln 39 + Ln 19 + Ln 20 + Ln 37) / Ln 33
29 BILLED NON-FPO REVENUE - CURRENT MONTH	\$209,964	\$325,013	\$362,349	\$325,663	\$266,227	\$157,864	\$1,647,080		Ln 27 * Ln 28
30 BILLED SALES OTHER PRIOR PERIODS	0	0	0	0	0	0	0		
31 COG OTHER PRIOR PERIODS BLENDED RATE	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
32 BILLED OTHER BLENDED REVENUE - PRIOR PERIODS	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
33 TOTAL SALES	149,904	232,044	258,700	232,508	190,073	112,707	1,175,936		Sch. J
34 TOTAL BILLED REVENUES	\$209,964	\$325,013	\$362,349	\$325,663	\$266,227	\$157,864	\$1,647,080		Ln 23 + Ln 26 + Ln 29 + Ln 32
35 UNBILLED REVENUES (NET)	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
36 TOTAL REVENUES	\$209,964	\$325,013	\$362,349	\$325,663	\$266,227	\$157,864	\$1,647,080		Ln 34 + Ln 35
37 (OVER)/UNDER COLLECTION	\$24,292	\$19,004	\$20,039	\$25,712	\$43,342	\$43,955	\$4,292		Ln 18 + Ln 19 - Ln 36
38 INTEREST AMOUNT	(\$1,133)	(\$987)	(\$856)	(\$700)	(\$460)	(\$155)	(\$4,291)		Sch. H
39 FINAL (OVER)/UNDER COLLECTION	(\$172,052)	(\$148,893)	(\$130,876)	(\$111,693)	(\$86,681)	(\$43,799)	\$1	\$1	Prior Mo Ln 39 + Ln 37 + Ln 38

REDACTED
SCHEDULE C
Winter 2023/2024 COG Filing

L BERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

CALCULATION OF PURCHASED GAS COSTS
W NTER PERIOD 2023 – 2024

LINE NO.		Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	TOTAL
1	TOTAL REQUIRED PURCHASES							
2	<u>PROPANE PURCHASE STABILIZATION PLAN DELIVERIES</u>							
3	THERMS	84,182	128,103	150,978	123,528	96,077	57,646	640,514
4	<u>RATES</u> - from Schedule D							
5	Contract Price	\$1.2586	\$1.2586	\$1.2586	\$1.2586	\$1.2586	\$1.2586	
6	Broker Fee	incl.	incl.	incl.	incl.	incl.	incl.	
7	Pipeline Fee	incl.	incl.	incl.	incl.	incl.	incl.	
8	PERC Fee	incl.	incl.	incl.	incl.	incl.	incl.	
9	Trucking Fee	incl.	incl.	incl.	incl.	incl.	incl.	
10	COST PER THERM	\$1.2586	\$1.2586	\$1.2586	\$1.2586	\$1.2586	\$1.2586	\$1.2586
11	TOTAL COST - Propane Purchase Stabilization Plan Deliveries	\$105,947	\$161,224	\$190,014	\$155,466	\$120,918	\$72,551	\$806,120
12	<u>AMHERST STORAGE PROPANE DELIVERIES</u>							
13	Therms		24,948	47,520	33,264	9,504	3,564	118,800
14	<u>RATES</u> - from Schedule F							
15	WACOG Price	\$0.0000	\$1.0020	\$1.0020	\$1.0020	\$1.0020	\$1.0020	
16	Trucking Fee	\$0.0000	\$0.0681	\$0.0681	\$0.0681	\$0.0681	\$0.0681	
17	COST PER THERM	\$0.0000	\$1.0701	\$1.0701	\$1.0701	\$1.0701	\$1.0701	\$1.0701
18	TOTAL COST - Amherst Storage Propane Deliveries	\$0	\$26,697	\$50,851	\$35,596	\$10,170	\$3,814	\$127,128
19	<u>CNG DELIVERIES</u>							
20	THERMS							
21	RATE							
22								
23	COST PER THERM							
24								
25	COST - CNG							
26								
27	TOTAL CNG							
28	<u>SPOT PURCHASES</u>							
29	THERMS							
30	From Schedule E							
31	COST PER THERM	\$1.3387	\$1.3437	\$1.3601	\$1.3605	\$1.3446	\$1.3268	\$1.3447
32	TOTAL COST - Spot Purchases							
33	<u>OTHER ITEMS</u>							
34	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35	Refund of Deferred Revenue Surcharge over collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0
36	TOTAL OTHER ITEMS	\$0	\$0	\$0	\$0	\$0	\$0	\$0
37	<u>TOTAL</u>							
38	THERMS FROM PROPANE							
39	COST							
40	THERMS FROM CNG							
41	COST							
42	COST PER THERM	\$1.3114	\$1.2676	\$1.2469	\$1.2676	\$1.2984	\$1.3253	\$1.2793

SCHEDULE D
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

PROPANE PURCHASING STABILIZATION PLAN
WINTER PERIOD 2023 – 2024

LINE
NO.

1 2 3 4 5 6 7 8 9 10	Delivery Month	Hedging Schedule & Volume (Gallons)						
		Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Total
	Nov-23	18,400	13,800	13,800	18,400	13,800	13,800	92,000
	Dec-23	28,000	21,000	21,000	28,000	21,000	21,000	140,000
	Jan-24	33,000	24,750	24,750	33,000	24,750	24,750	165,000
	Feb-24	27,000	20,250	20,250	27,000	20,250	20,250	135,000
	Mar-24	21,000	15,750	15,750	21,000	15,750	15,750	105,000
	Apr-24	12,600	9,450	9,450	12,600	9,450	9,450	63,000
	Total Volume	140,000	105,000	105,000	140,000	105,000	105,000	700,000
	Monthly %	20.0%	15.0%	15.0%	20.0%	15.0%	15.0%	

11	Delivery Price per Gallon	\$1.1487	\$1.1538	\$1.1629	\$1.1618	\$1.1402	\$1.1182	
12	Total Cost	\$105,677	\$161,536	\$191,884	\$156,847	\$119,724	\$70,447	\$806,114
13	Weighted Average Winter Contract Price per gallon							\$1.1516
14	Weighted Average Winter Contract Price per therm							\$1.2586

SCHEDULE E
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

PROPANE SPOT MARKET PURCHASE COST ANALYSIS
WINTER PERIOD 2023 – 2024

		(1) Mt. Belvieu		(2) Broker Fee		(3) Pipeline Rate		(4) PERC Fee		(5) Supplier Charge		(6) Cost @ Selkirk		(7) Trucking to Keene		(8) \$ per Gal.		(9) \$ per Therm
1	NOV	0.7517	+	0.0125	+	0.2921	+	0.0050	+	0.0400	=	1.1013	+	0.1236	=	1.2249	=	1.3387
2	DEC	0.7563	+	0.0125	+	0.2921	+	0.0050	+	0.0400	=	1.1059	+	0.1236	=	1.2295	=	1.3437
3	JAN	0.7713	+	0.0125	+	0.2921	+	0.0050	+	0.0400	=	1.1209	+	0.1236	=	1.2445	=	1.3601
4	FEB	0.7717	+	0.0125	+	0.2921	+	0.0050	+	0.0400	=	1.1213	+	0.1236	=	1.2449	=	1.3605
5	MAR	0.7571	+	0.0125	+	0.2921	+	0.0050	+	0.0400	=	1.1067	+	0.1236	=	1.2303	=	1.3446
6	APR	0.7408	+	0.0125	+	0.2921	+	0.0050	+	0.0400	=	1.0905	+	0.1236	=	1.2141	=	1.3268

1. Propane futures market quotations (cmegroup.com) on 9/6/23 close. See Appendix 1.

2. A generally accepted standard broker fee

3. Pipeline rate from Mt. Belvieu to Selkirk

4. Propane Education Research Council (propanecouncil.org)

5. A generally accepted standard supplier charge

6. Selkirk Cost - all fees plus propane cost

7. Northern Gas Transport trucking rate including diesel fuel surcharge. See Appendix 3A & 3B.

8. Delivered Price per Gallon

9. Delivered Price per therm as converted using per gallon price / .91502

REDACTED
SCHEDULE F
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

INVENTORY & WEIGHTED AVERAGE COST OF GAS CALCULATION
WINTER PERIOD 2023 – 2024

LINE NO.		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		<u>Therms</u>	<u>Cost</u>	<u>Therm</u>	<u>Rate Gal.</u>	<u>CNG therms</u>	<u>Cost</u>	<u>Total Sendout</u>	<u>Total Cost</u>		<u>Therm Rate</u>
1	August 2023 (Actual)										
2	Beginning Balance	56,679	\$68,130	\$1.2020	\$1.0999						
3	Purchases Received	155,230	\$163,772	\$1.0550	\$0.9654						
4	Total Available	211,909	\$231,902	\$1.0943	\$1.0014						
5	Less Sendout	40,091	\$43,873	\$1.0943	\$1.0013						
6	Ending Balance	171,818	\$188,029	\$1.0944	\$1.0014						
7	September 2023 (Estimated)										
8	Beginning Balance	171,818	\$188,029	\$1.0944	\$1.0014						
9	Purchases Received	45,400	\$50,704	\$1.1168	\$1.0219						
10	Total Available	217,218	\$238,733	\$1.0990	\$1.0057						
11	Less Sendout	45,400	\$49,897	\$1.0991	\$1.0057						
12	Ending Balance	171,818	\$188,836	\$1.0990	\$1.0057						
13	October 2023 (Estimated)										
14	Beginning Balance	171,818	\$188,836	\$1.0990	\$1.0057						
15	Purchases Received	80,106	\$102,638	\$1.2813	\$1.1724						
16	Total Available	251,924	\$291,474	\$1.1570	\$1.0587						
17	Less Sendout	80,106	\$92,682	\$1.1570	\$1.0587						
18	Ending Balance	171,818	\$198,792	\$1.1570	\$1.0587						
19	November 2023 (Forecasted)										
20	Beginning Balance	171,818	\$198,792	\$1.1570	\$1.0587						
21	Purchases Received	129,847	\$167,078	\$1.2867	\$1.1774						
22	Total Available	301,666	\$365,871	\$1.2128	\$1.1098						
23	Less Sendout	129,847	\$157,484	\$1.2128	\$1.1098						
24	Ending Balance	171,818	\$208,387	\$1.2128	\$1.1098						\$1.250
25	December 2023 (Forecasted)										
26	Beginning Balance	171,818	\$208,387	\$1.2128	\$1.1098						
27	Purchases Received	174,043	\$222,953	\$1.2810	\$1.1722						
28	Total Available	345,862	\$431,340	\$1.2471	\$1.1412						
29	Less Sendout	198,991	\$248,172	\$1.2471	\$1.1412						
30	Ending Balance	146,870	\$183,168	\$1.2471	\$1.1412						\$1.262
31	January 2024 (Forecasted)										
32	Beginning Balance	146,870	\$183,168	\$1.2471	\$1.1412						
33	Purchases Received	172,522	\$219,315	\$1.2712	\$1.1632						
34	Total Available	319,392	\$402,483	\$1.2602	\$1.1531						
35	Less Sendout	220,042	\$277,287	\$1.2602	\$1.1531						
36	Ending Balance	99,350	\$125,196	\$1.2601	\$1.1531						\$1.273
37	February 2024 (Forecasted)										
38	Beginning Balance	99,350	\$125,196	\$1.2601	\$1.1531						
39	Purchases Received	163,548	\$209,915	\$1.2835	\$1.1744						
40	Total Available	262,898	\$335,110	\$1.2747	\$1.1664						
41	Less Sendout	196,812	\$250,872	\$1.2747	\$1.1664						
42	Ending Balance	66,086	\$84,238	\$1.2747	\$1.1664						\$1.290
43	March 2024 (Forecasted)										
44	Beginning Balance	66,086	\$84,238	\$1.2747	\$1.1664						
45	Purchases Received	150,084	\$209,915	\$1.3986	\$1.2798						
46	Total Available	216,170	\$294,153	\$1.3607	\$1.2451						
47	Less Sendout	159,588	\$217,159	\$1.3607	\$1.2451						
48	Ending Balance	56,582	\$76,994	\$1.3607	\$1.2451						\$1.366
49	April 2024 (Forecasted)										
50	Beginning Balance	56,582	\$76,994	\$1.3607	\$1.2451						
51	Purchases Received	93,612	\$120,272	\$1.2848	\$1.1756						
52	Total Available	150,194	\$197,266	\$1.3134	\$1.2018						
53	Less Sendout	97,176	\$127,631	\$1.3134	\$1.2018						
54	Ending Balance	53,018	\$69,635	\$1.3134	\$1.2018						\$1.355
55	AVERAGE WINTER RATE - SENDOUT										
56						FPO Premium (Sch. B, Line 15)			\$3,067		
57											

REDACTED
SCHEDULE G (RECONCILIATION)
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGY NORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

CALCULATION OF COST OF GAS RATE
SUPPLY / DEMAND BALANCE
WINTER PERIOD 2022 – 2023

	PRIOR	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	TOTAL	REFERENCE
PROpane COSTS															
1 PROPANE FIRM SENDOUT (therms)															Company actuals
2 COMPANY USE (therms)															Company actuals
3 TOTAL PROPANE SENDOUT (therms)															Ln 1 + Ln 2
4 COST PER THERM (WACOG)		\$1,554.7	\$1,563.7	\$1,616.0	\$1,634.6	\$1,599.6	\$1,592.4	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		Sch F, Col. 2
5 TOTAL CALCULATED COST OF PROPANE		\$188,430	\$300,324	\$299,955	\$292,935	\$243,266	\$135,651	\$0	\$1	\$0	\$0	\$0	\$0	\$1,460,561	Ln 3 * Ln 4
6 INDIRECT COSTS FROM DG 20-105		\$34,688	\$34,688	\$34,688	\$34,688	\$34,688	\$34,688	\$0	\$0	\$0	\$0	\$0	\$0	\$208,129	DG 20-105, Section 11.2 (f)
7 PROPANE ADJUSTMENTS		(\$1)	(\$0)	\$1	\$1	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
8 TOTAL COST OF PROPANE		\$223,117.56	\$335,011.93	\$334,644.21	\$327,623.75	\$277,954.05	\$170,339.46	\$0	\$1	\$0	\$0	\$0	\$0	\$1,668,691	Ln 5 + Ln 6 + Ln 7
CNG COSTS															
9 CNG SENDOUT (therms)															Company actuals
10 COMPANY USE (therms)															Company actuals
11 TOTAL CNG SENDOUT (therms)															Ln 9 + Ln 10
12 COST PER THERM (WACOG)															Sch C, Ln 21
13 TOTAL CALCULATED COST OF CNG															Ln 9 Ln 10
14 CNG DEMAND CHARGES															Sch C, Ln 26
15 PROJECTED INCREMENTAL COSTS Winter 2022-2023															Sch. N Ln 7, Ln. 25
16 NET INCREMENTAL COSTS															Ln 13 + Ln 14
17 CNG ADJUSTMENT															
18 TOTAL CNG COSTS															Ln 11 + Ln 12 + Ln 13 + Ln
19 GAS ASSISTANCE PLAN (GAP)		(145.33)	(42.71)	(10,909.25)	(763.89)	(13,427.90)	(89.64)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	(\$25,379)	
20 TOTAL COSTS OF GAS															Ln 8 + Ln 16 + Ln 17 + Ln
21 RETURN ON INVENTORY		\$2,554	\$2,554	\$2,554	\$2,554	\$2,554	\$2,554	\$0	\$0	\$0	\$0	\$0	\$0	\$	15,323 Company calculation
REVENUES															
22 BILLED FPO SALES (therms)		428	844	12,913	848	10,405	0	0	0	0	0	0	0	25,438	Company actuals
23 COG FPO RATE		\$2,1416	\$2,1416	\$2,1416	\$2,1416	\$2,1416	\$2,1416	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (f)
24 BILLED FPO REVENUE - CURRENT MONTH		\$915.92	\$1,809	\$27,655	\$1,815	\$22,283	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$54,478	Ln 22 Ln 23
25 BILLED FPO SALES (therms)		5	29	239	0	204	0	0	0	0	0	0	0	477	Company actuals
26 COG FPO GAP RATE R-4		\$1,1779	\$1,1779	\$1,1779	\$1,1779	\$1,1779	\$1,1779	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (f)
27 BILLED FPO GAP REVENUE R-4 - CURRENT MONTH		\$6.18	\$34	\$281	\$0	\$240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$562	Ln 25 * Ln 26
28 BILLED NON-FPO SALES PRIOR MONTH (therms)		0	6,427	170,804	0	271,872	320	0	0	0	0	0	0	449,423	Company actuals
29 COG NON-FPO RATE PRIOR MONTH		\$0.0000	\$2,1216	\$2,1118	\$1,8120	\$1,8120	\$2,0122	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (f)
30 BILLED FPO REVENUE - PRIOR MONTH		\$0	\$13,636	\$360,704	\$0	\$492,632	\$644	\$0	\$0	\$0	\$0	\$0	\$0	\$867,616	Ln 28 * Ln 29
31 BILLED NON-FPO SALES CURRENT MONTH (therms)		14,450	16,881	131,123	26,386	135,775	317	0	0	0	0	0	0	324,933	Company actuals
32 COG NON-FPO RATE CURRENT MONTH		\$2,1216	\$2,1118	\$1,8120	\$2,0122	\$2,0122	\$2,6520	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (f)
33 BILLED NON-FPO REVENUE - CURRENT MONTH		\$30,658	\$35,649	\$237,596	\$47,811	\$273,207	\$842	\$0	\$0	\$0	\$0	\$0	\$0	\$625,762	Ln 31 * Ln 32
34 BILLED NON-FPO SALES CURRENT MONTH (therms)		84	47	4,464	629	4,564	0	0	0	0	0	0	0	9,789	Company actuals
35 COG NON-FPO GAP RATE R-4 RATE CURRENT MONTH		\$1,1669	\$1,1615	\$0,9966	\$0,9966	\$1,1067	\$1,4586	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (f)
36 BILLED NON-FPO GAP RATE R-4 REVENUE - CURRENT MONTH		\$98	\$55	\$4,449	\$627	\$5,051	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,280	Ln 34 * Ln 35
37 BILLED NON-FPO SALES PRIOR MONTH (therms)		0	43	5,507	0	8,628	99	0	0	0	0	0	0	14,277	Company actuals
38 COG NON-FPO GAP RATE R-4 RATE PRIOR MONTH		\$0.0000	\$1,1669	\$1,1615	\$0,9966	\$0,9966	\$1,1067	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (f)
39 BILLED NON-FPO GAP RATE R-4 REVENUE - PRIOR MONTH		\$0	\$50	\$6,396	\$0	\$8,599	\$109	\$0	\$0	\$0	\$0	\$0	\$0	\$15,155	Ln 37 * Ln 38
40 BILLED SALES OTHER PRIOR PERIODS		0	0	113,891	336	16,052	291	0	0	0	0	0	0	130,570	Company actuals
41 COG OTHER PRIOR PERIODS BLENDED RATE		\$0.0000	\$0.0000	\$2,0947	\$1,3755	\$2,0230	(\$1,9853)	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (f)
42 BILLED OTHER BLENDED REVENUE - PRIOR PERIODS		\$0	\$0	\$236,572	\$462	\$32,473	(\$543)	\$0	\$0	\$0	\$0	\$0	\$0	\$270,965	Ln 40 * Ln 41
43 TOTAL SALES		14,967	24,272	438,941	28,199	447,501	1,027	0	0	0	1	0	2	954,907	Ln 22 Ln 25 Ln 28 Ln 31
44 TOTAL BILLED REVENUES		\$31,678.06	\$51,233.58	\$875,652.88	\$50,715.65	\$834,485.70	\$1,052.16	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,844,818	Ln 24 + Ln 27 + Ln 30 + Ln
45 UNBILLED REVENUES (NET)		267,317	172,062	(298,425)	207,180	(288,265)	204,081	-	-	-	-	-	-	\$263,950	
46 TOTAL REVENUES		\$298,995	\$223,296	\$577,228	\$257,896	\$546,221	\$205,133	\$0						\$2,108,768	Ln 44 + Ln 45
47 (OVER)/UNDER COLLECTION		(\$37,215)	\$178,819	(\$194,335)	\$121,560	(\$235,681)	(\$8,758)	\$6,875	\$6,876	\$6,875	\$6,875	\$6,875	\$6,875	(\$83,624)	Ln 20 + Ln 21 - Ln 46
48 INTEREST AMOUNT		145.95	570.24	592.49	366.77	33.68	(670.86)	-	-	-	-	-	-	\$1,038	
49 FINAL (OVER)/UNDI		\$50,737	\$13,668	\$193,057	(\$686)	\$121,241	(\$114,407)	(\$123,836)	(\$116,961)	(\$110,084)	(\$103,209)	(\$96,334)	(\$89,459)	(\$82,584)	Prior Mo Ln 49 + Ln 47 + L

SCHEDULE H
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

INTEREST CALCULATION
WINTER PERIOD 2023 – 2024

LINE NO.	MONTH	(1) BEG. OF MONTH BALANCE	(2) (OVER) UNDER COLLECT	(3) ADJUSTMENTS	(4) REFUNDS	(5) END OF MONTH BALANCE (COL. 1+2+3+4)	(6) AVERAGE BALANCE COL. (COL. [1+5]/2)	(7) ANNUAL INTEREST RATE	(8) INTEREST AMOUNT	(9) MONTH END BAL. WITH INTEREST (COL. 4+7)
1	MAY 2023	\$ (114,671)	-	(82,785)	\$0	(\$197,456)	(\$156,064)	8.00%	(1,060)	(\$198,516)
2	JUN	(198,516)	0	6,791	0	(\$191,726)	(195,121)	8.25%	(1,323)	(193,049)
3	JUL	(193,049)	0	5,526	0	(\$187,523)	(190,286)	8.25%	(1,333)	(188,856)
4	AUG 1/	(188,856)	0	6,875	0	(\$181,981)	(185,418)	8.50%	(1,313)	(183,294)
5	SEP 1/	(183,294)	0	6,875	0	(\$176,419)	(179,856)	8.50%	(1,274)	(177,693)
6	OCT 1/	(177,693)	0	6,875	0	(\$170,818)	(174,255)	8.50%	(1,234)	(172,052)
7	NOV	(172,052)	24,292	0	0	(\$147,760)	(159,906)	8.50%	(1,133)	(148,893)
8	DEC	(148,893)	19,004	0	0	(\$129,889)	(139,391)	8.50%	(987)	(130,876)
9	JAN 2024	(130,876)	20,039	0	0	(\$110,837)	(120,856)	8.50%	(856)	(111,693)
10	FEB	(111,693)	25,712	0	0	(\$85,981)	(98,837)	8.50%	(700)	(86,681)
11	MAR	(86,681)	43,342	0	0	(\$43,339)	(65,010)	8.50%	(460)	(43,799)
12	APR	(43,799)	43,955	0	0	\$156	(21,821)	8.50%	(155)	1
13										
14									<u>(\$11,829)</u>	

		BEGINNING BALANCE MAY 2023		ADJUSTMENTS MAY-OCT 2023		INTEREST MAY-OCT 2023		ENDING BALANCE w/ INTEREST OCTOBER 2023
15	=	COL. 1, LINE 1	+	COL. 3 LINES 1 TO 6	+	COL. 8, LINES 1 TO 6		COL 9, LINE 6
16	=	(114,671)	+	(49,843)	+	(7,538)	=	<u>(172,052)</u> (TRANSFER TO SCHEDULE B, LINE 39)

Notes:

1/ Estimates used based on expected demand charges August - October

SCHEDULE I
Winter 2023/2024 COG Filing

L BERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A L BERTY - KEENE DIVISION													
Weather Normalization - Firm Sendout (Therms)													
Period	Actual Firm Sendout	Base Use	Heat Use	Actual Calendar Month Degree Days	Normal Calendar Month Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normalized Firm Sendout	Actual Company Use	Unaccounted For 0.64%	Total Firm Sendout
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			(1) - (2)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)		(10 - 11) * 0.64%	(10) - (11) + (12)
1 Nov-23	151,958	49,163	102,795	792	826	(34)	129.79	4,413	107,208	156,371	4,067	977	153,280
2 Dec-23	241,281	49,163	192,118	1,108	1,108	0	173.39	0	192,118	241,281	5,703	1,511	237,088
3 Jan-24	235,413	49,163	186,250	1,094	1,291	(197)	170.25	33,539	219,789	268,952	5,556	1,689	265,086
4 Feb-24	228,175	49,163	179,012	1,046	1,125	(79)	171.14	13,520	192,532	241,695	5,346	1,516	237,866
5 Mar-24	195,715	49,163	146,552	961	975	(14)	152.50	2,135	148,687	197,850	4,832	1,238	194,256
6 Apr-24	113,657	49,163	64,494	545	604	(59)	118.34	6,982	71,476	120,639	5,741	737	115,635
7													
8 Total	1,166,199	294,978	871,221	5,546	5,929	(383)		60,589	931,810	1,226,788	31,246	7,668	1,203,211

SCHEDULE J
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION											
Weather Normalization - Sales (Therms) - Rate Residential											
Period	Customers	Sales	Base Load	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				(1) - (2)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)
Nov-23	881	34,236	6,042	28,194	792	826	(34)	35.60	1,210	29,404	35,446
Dec-23	911	54,939	6,042	48,897	1,108	1,108	0	44.13	0	48,897	54,939
Jan-24	911	53,239	6,042	47,197	1,094	1,291	(197)	43.14	8,499	55,696	61,738
Feb-24	821	50,549	6,042	44,507	1,046	1,125	(79)	42.55	3,361	47,868	53,910
Mar-24	907	42,581	6,042	36,539	961	975	(14)	38.02	532	37,071	43,113
Apr-24	868	23,664	6,042	17,622	545	604	(59)	32.33	1,908	19,530	25,572
Total		259,208	36,252	222,956	5,546	5,929	(383)	40.50	15,511	238,467	274,718

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION											
Weather Normalization - Sales (Therms) - Rate Commercial											
Period	Customers	Sales	Base Load	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				(1) - (3)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)
Nov-23	315	111,436	41,051	70,385	792	826	(34)	88.87	3,022	73,407	114,458
Dec-23	330	177,105	41,051	136,054	1,108	1,108	0	122.79	0	136,054	177,105
Jan-24	332	173,171	41,051	132,120	1,094	1,291	(197)	120.77	23,791	155,911	196,962
Feb-24	301	168,939	41,051	127,888	1,046	1,125	(79)	122.26	9,659	137,547	178,598
Mar-24	332	145,439	41,051	104,388	961	975	(14)	108.62	1,521	105,909	146,960
Apr-24	316	82,633	41,051	41,582	545	604	(59)	76.30	4,502	46,084	87,135
Total		858,723	246,306	612,417	5,546	5,929	(383)	110.95	42,494	654,911	901,218

Summary - Total Winter Season Sales		
	Actual 2022-2023	Normalized
November	145,672	149,904
December	232,044	232,044
January	226,410	258,700
February	219,488	232,508
March	188,020	190,073
April	106,297	112,707
Total	1,117,931	1,175,936

SCHEDULE K-1
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION
Typical Residential Heating Bill - Fixed Price Option Program
Forecasted 2023-2024 Winter Period vs. Actual 2022-2023 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
Typical Usage - therms (1)	39	69	81	103	89	66	447
Residential Heating R-3							
Customer Charge \$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34
Delivery Charge: All therms @ \$0.6519	\$25.42	\$44.98	\$52.80	\$67.15	\$58.02	\$43.03	\$291.40
Base Delivery Revenue Total	\$40.81	\$60.37	\$68.19	\$82.54	\$73.41	\$58.42	\$383.74
COG Rates	\$2.1416	\$2.1416	\$2.1416	\$2.1416	\$2.1416	\$2.1416	\$2.1416
Cost of Gas Total	\$83.52	\$147.77	\$173.47	\$220.58	\$190.60	\$141.35	\$957.29
LDAC Rates	\$0.1086	\$0.1086	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1107
LDAC Total	\$4.24	\$7.49	\$9.02	\$11.46	\$9.91	\$7.35	\$49.47
Total Bill	\$129	\$216	\$251	\$315	\$274	\$207	\$1,390
	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter Nov-Apr
Typical Usage - therms (1)	39	69	81	103	89	66	447
Residential Heating R-3							
Customer Charge \$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34
Delivery Charge: All therms @ \$0.6167	\$24.05	\$42.55	\$49.95	\$63.52	\$54.89	\$40.70	\$275.66
Base Delivery Revenue Total	\$39.44	\$57.94	\$65.34	\$78.91	\$70.28	\$56.09	\$368.00
Seasonal Base Delivery Difference from previous year							-\$15.74
Seasonal Percent Change from previous year							-4.1%
COG Rates	\$1.4207	\$1.4207	\$1.4207	\$1.4207	\$1.4207	\$1.4207	\$1.4207
Cost of Gas Total	\$55.41	\$98.03	\$115.08	\$146.33	\$126.44	\$93.77	\$635.06
Seasonal COG Difference from previous year							-\$322.23
Seasonal Percent Change from previous year							-33.7%
LDAC Rates	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180
LDAC Total	\$4.60	\$8.14	\$9.56	\$12.15	\$10.50	\$7.79	\$52.74
Seasonal LDAC Difference from previous year							\$3.27
Seasonal Percent Change from previous year							6.6%
Total Bill	\$99	\$164	\$190	\$237	\$207	\$158	\$1,055.80
Seasonal Total Bill Difference from previous year							-\$334.70
Seasonal Percent Change from previous year							-24.1%
Seasonal Percent Change resulting from COG							-23.2%
Seasonal Percent Change resulting from LDAC							0.2%

35 (1) Residential Heating Typical Usage: Residence using gas for heat, hot water and cooking.

SCHEDULE K-2
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION
Typical Residential Heating Bill - Non-Fixed Price Option Program
Forecasted 2023-2024 Winter Period vs. Actual 2022-2023 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
Typical Usage - therms (1)	39	69	81	103	89	66	447
Residential Heating R-3							
Customer Charge \$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34
Delivery Charge: All therms @ \$0.6519	\$25.42	\$44.98	\$52.80	\$67.15	\$58.02	\$43.03	\$291.40
Base Delivery Revenue Total	\$40.81	\$60.37	\$68.19	\$82.54	\$73.41	\$58.42	\$383.74
COG Rates	\$2.1216	\$2.1118	\$1.8120	\$1.8120	\$2.0122	\$2.6520	\$2.0492
Cost of Gas Total	\$82.74	\$145.71	\$146.77	\$186.64	\$179.09	\$175.03	\$915.98
LDAC Rates	\$0.1086	\$0.1086	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1107
LDAC Total	\$4.24	\$7.49	\$9.02	\$11.46	\$9.91	\$7.35	\$49.47
Total Bill	\$128	\$214	\$224	\$281	\$262	\$241	\$1,349
	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter Nov-Apr
Typical Usage - therms (1)	39	69	81	103	89	66	447
Residential Heating R-3							
Customer Charge \$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34
Delivery Charge: All therms @ \$0.6167	\$24.05	\$42.55	\$49.95	\$63.52	\$54.89	\$40.70	\$275.66
Base Delivery Revenue Total	\$39.44	\$57.94	\$65.34	\$78.91	\$70.28	\$56.09	\$368.00
Seasonal Base Delivery Difference from previous year							-\$15.73
Seasonal Percent Change from previous year							-4.1%
COG Rates	\$1.4007	\$1.4007	\$1.4007	\$1.4007	\$1.4007	\$1.4007	\$1.4007
Cost of Gas Total	\$54.63	\$96.65	\$113.46	\$144.27	\$124.66	\$92.45	\$626.12
Seasonal COG Difference from previous year							-\$289.86
Seasonal Percent Change from previous year							-31.6%
LDAC Rates	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180
LDAC Total	\$4.60	\$8.14	\$9.56	\$12.15	\$10.50	\$7.79	\$52.74
Seasonal LDAC Difference from previous year							\$3.27
Seasonal Percent Change from previous year							-313.9%
Total Bill	\$99	\$163	\$188	\$235	\$205	\$156	\$1,046.86
Seasonal Total Bill Difference from previous year							-\$302.32
Seasonal Percent Change from previous year							-22.4%
Seasonal Percent Change resulting from COG							-21.5%
Seasonal Percent Change resulting from LDAC							0.2%

35 (1) Residential Heating Typical Usage: Residence using gas for heat, hot water and cooking.

SCHEDULE L-1
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION
Typical Commercial Bill - Fixed Price Option Program
Forecasted 2023-2024 Winter Period vs. Actual 2022-2023 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
Typical Usage - therms	133	249	307	403	367	262	1,721
Commercial G-41							
Customer Charge \$63.30	\$63.30	\$63.30	\$63.30	\$63.30	\$63.30	\$63.30	\$379.80
Delivery Charge: First 100 therms @ \$0.5088	\$50.88	\$50.88	\$50.88	\$50.88	\$50.88	\$50.88	\$305.28
Over 100 therms @ \$0.3550	\$11.72	\$52.90	\$73.49	\$107.57	\$94.79	\$57.51	\$397.98
Base Delivery Revenue Total	\$125.90	\$167.08	\$187.67	\$221.75	\$208.97	\$171.69	\$1,083.06
COG Rates	\$2.1416	\$2.1416	\$2.1416	\$2.1416	\$2.1416	\$2.1416	\$2.1416
Cost of Gas Total	\$284.83	\$533.26	\$657.47	\$863.06	\$785.97	\$561.10	\$3,685.69
LDAC Rates	\$0.0872	\$0.0872	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0886
LDAC Total	\$11.60	\$21.71	\$27.32	\$35.87	\$32.66	\$23.32	\$152.48
Total Bill	\$422	\$722	\$872	\$1,121	\$1,028	\$756	\$4,921
	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter Nov-Apr
Typical Usage - therms	133	249	307	403	367	262	1,721
Commercial G-41							
Customer Charge \$60.81	\$60.81	\$60.81	\$60.81	\$60.81	\$60.81	\$60.81	\$364.86
Delivery Charge: First 100 therms @ \$0.4928	\$49.28	\$49.28	\$49.28	\$49.28	\$49.28	\$49.28	\$295.68
Over 100 therms @ \$0.3390	\$11.72	\$52.90	\$73.49	\$107.57	\$94.79	\$57.51	\$397.98
Base Delivery Revenue Total	\$121.81	\$162.99	\$183.58	\$217.66	\$204.88	\$167.60	\$1,058.52
Seasonal Base Delivery Difference from previous year							-\$24.54
Seasonal Percent Change from previous year							-2.3%
COG Rates	\$1.4207	\$1.4207	\$1.4207	\$1.4207	\$1.4207	\$1.4207	\$1.4207
Cost of Gas Total	\$188.95	\$353.75	\$436.15	\$572.54	\$521.40	\$372.22	\$2,445.01
Seasonal COG Difference from previous year							-\$1,240.68
Seasonal Percent Change from previous year							-33.7%
LDAC Rates	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957
LDAC Total	\$12.73	\$23.83	\$29.38	\$38.57	\$35.12	\$25.07	\$164.70
Seasonal LDAC Difference from previous year							\$12.22
Seasonal Percent Change from previous year							8.0%
Total Bill	\$323	\$541	\$649	\$829	\$761	\$565	\$3,668
Seasonal Total Bill Difference from previous year							-\$1,253.00
Seasonal Percent Change from previous year							-25.5%
Seasonal Percent Change resulting from COG							-25.2%
Seasonal Percent Change resulting from LDAC							0.2%

SCHEDULE L-2
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION
Typical Commercial Bill - Non Fixed Price Option Program
Forecasted 2023-2024 Winter Period vs. Actual 2022-2023 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
Typical Usage - therms	133	249	307	403	367	262	1,721
Commercial G-41							
Customer Charge \$63.30	\$63.30	\$63.30	\$63.30	\$63.30	\$63.30	\$63.30	\$379.80
Delivery Charge: First 100 therms @ \$0.5088	\$50.88	\$50.88	\$50.88	\$50.88	\$50.88	\$50.88	\$305.28
Over 100 therms @ \$0.3550	\$11.72	\$52.90	\$73.49	\$107.57	\$94.79	\$57.51	\$397.98
Base Delivery Revenue Total	\$125.90	\$167.08	\$187.67	\$221.75	\$208.97	\$171.69	\$1,083.06
COG Rates	\$2.1216	\$2.1118	\$1.8120	\$1.8120	\$2.0122	\$2.6520	\$2.0499
Cost of Gas Total	\$282.17	\$525.84	\$556.28	\$730.24	\$738.48	\$694.82	\$3,527.83
LDAC Rates	\$0.0872	\$0.0872	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0886
LDAC Total	\$11.60	\$21.71	\$27.32	\$35.87	\$32.66	\$23.32	\$152.48
Total Bill	\$420	\$715	\$771	\$988	\$980	\$890	\$4,763
	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter Nov-Apr
Typical Usage - therms	133	249	307	403	367	262	1,721
Commercial G-41							
Customer Charge \$60.81	\$60.81	\$60.81	\$60.81	\$60.81	\$60.81	\$60.81	\$364.86
Delivery Charge: First 100 therms @ \$0.4928	\$49.28	\$49.28	\$49.28	\$49.28	\$49.28	\$49.28	\$295.68
Over 100 therms @ \$0.3390	\$11.72	\$52.90	\$73.49	\$107.57	\$94.79	\$57.51	\$397.98
Base Delivery Revenue Total	\$121.81	\$162.99	\$183.58	\$217.66	\$204.88	\$167.60	\$1,058.52
Seasonal Base Delivery Difference from previous year							-\$24.54
Seasonal Percent Change from previous year							-2.3%
COG Rates	\$1.4007	\$1.4007	\$1.4007	\$1.4007	\$1.4007	\$1.4007	\$1.4007
Cost of Gas Total	\$186.29	\$348.77	\$430.01	\$564.48	\$514.06	\$366.98	\$2,410.59
Seasonal COG Difference from previous year							-\$1,117.24
Seasonal Percent Change from previous year							-31.7%
LDAC Rates	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957
LDAC Total	\$12.73	\$23.83	\$29.38	\$38.57	\$35.12	\$25.07	\$164.70
Seasonal LDAC Difference from previous year							\$12.22
Seasonal Percent Change from previous year							8.0%
Total Bill	\$321	\$536	\$643	\$821	\$754	\$560	\$3,634
Seasonal Total Bill Difference from previous year							-\$1,129.56
Seasonal Percent Change from previous year							-23.7%
Seasonal Percent Change resulting from COG							-23.5%
Seasonal Percent Change resulting from LDAC							0.3%

SCHEDULE M
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION										
Historical COG Comparison - FPO vs. Non-FPO Bill										
	Winter Period	FPO Rate	Amount of Premium	Percent Participation (therms)	Actual FPO Volumes	Premium Revenue	Typical Residential FPO bill	Average Non-FPO Rate	Typical Residential Non-FPO bill	Cost/(Savings) to FPO Customers
1	2022-2023	\$2.1416	\$0.02	2.71%	25,915	\$518	\$957	\$1.9002	\$849	\$108
2	2021-2022	\$1.8941	\$0.02	11.35%	126,993	\$2,540	\$847	\$1.9452	\$869	(\$23)
3	2020-2021	\$2.0068	\$0.02	10.99%	122,937	\$2,459	\$897	\$1.9053	\$852	\$45
4	2019-2020	\$0.9692	\$0.02	7.08%	74,930	\$1,499	\$433	\$0.9085	\$406	\$27
5	2018-2019	\$1.3743	(\$0.01)	15.64%	181,485	-\$1,071	\$614	\$1.4301	\$639	(\$25)
6	2017-2018	\$1.2408	\$0.02	20.14%	221,383	\$4,428	\$527	\$1.4053	\$597	(\$70)
7	2016-2017	\$1.5352	\$0.02	19.32%	201,959	\$4,039	\$863	\$1.5247	\$900	(\$37)
8	2015-2016	\$0.8988	\$0.02	24.54%	224,981	\$4,500	\$480	\$0.6620	\$354	\$126
9	2014-2015	\$1.7269	\$0.02	32.16%	384,297	\$7,686	\$929	\$1.4213	\$765	\$164
10	2013-2014	\$1.6985	\$0.02	17.94%	206,379	\$4,128	\$914	\$2.0092	\$1,081	(\$167)
11	2012-2013	\$1.5217	\$0.02	20.81%	207,298	\$4,146	\$819	\$1.5002	\$807	\$12
12	2011-2012	\$2.2357	\$0.02	18.21%	152,560	\$3,051	\$1,203	\$2.1253	\$1,143	\$59
13	2010-2011	----- FPO not offered due to Selkirk terminal embargo -----								
14	2009-2010	\$1.3402	\$0.02	17.12%	163,486	\$3,270	\$721	\$1.4900	\$802	(\$81)
15	2008-2009	\$2.2408	\$0.02	21.08%	205,970	\$4,119	\$1,206	\$1.7347	\$933	\$272
16	2007-2008	\$1.5212	\$0.02	28.01%	266,419	\$5,328	\$818	\$1.7646	\$949	(\$131)
17	2006-2007	\$1.4741	\$0.02	21.86%	206,686	\$4,134	\$793	\$1.5397	\$828	(\$35)
18	2005-2006	\$1.5260	\$0.02	42.91%	348,849	\$6,977	\$821	\$1.3742	\$739	\$82
19	2004-2005	\$1.2323	n/a	39.44%	340,315	n/a	\$663	\$1.2647	\$680	(\$17)
20	2003-2004	\$0.8877	n/a	38.78%	316,300	n/a	\$478	\$1.0325	\$555	(\$78)
21	Average						\$790		\$785	\$5

REDACTED
SCHEDULE N
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION
PROJECTED INCREMENTAL COSTS CNG VS. SPOT PROPANE Winter 2023-2024

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Projected	Projected	Projected	Projected	Projected	Projected	
	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	
1 CNG PURCHASES							
2 CNG Volumes (Schedule C Filing)							
3							
4 CNG Costs (Schedule C Filing)							
5 Total Cost per Actual CNG Costs (Schedule C Filing)							
6							
7 CNG Cost Per Therm Actual							
8							
9 SPOT PROPANE PURCHASES							
10 Spot Propane Volumes (Schedule C Reconciliation)							
11							
12 Total Costs Spot Propane							
13 Total Cost Spot Propane							
14							
15 Spot Propane Cost Per Therm Actual	\$ 1.3387	\$ 1.3437	\$ 1.3601	\$ 1.3605	\$ 1.3446	\$ 1.3268	\$ 1.3447
16							
17							
18							
19 CNG Volumes							
20 Price difference CNG vs Spot Propane							
21 Adj. for rounding							\$0.0000
22 Incremental Costs Propane							\$ (6,221)
23							
24							
25							
						Allowed Recoverable Costs	\$ (3,110)

SCHEDULE O
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION
CNG Incremental Cost/Saving Risk Sharing - 50% Shareholder/Customers
Incremental CNG Supply Costs - Winter 2023 – Winter 2024

	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G
1	CNG Increment Cost/Saving Risk Sharing - 50% Shareholder/Ratepayers						
2	Incremental CNG Supply Costs - October 2019 thru October 2023						
3	COG Period	Year	Incremental Cost/(Savings) Amount	Allowed Recoverable Amount from Customers due to Higher/(Lower) CNG vs Propane Costs	Incremental Costs Not Recoverable/D eferred	Incremental Costs not Recovered Balance	(Refund)/Charge
4	Winter (DG 20-105 Settlement Agreement)	2019-20	132,469	66,235	66,235	66,235	66,299
	Winter DG 20-152	2020-21	44,016	22,008	22,008	88,243	22,008
	Winter DG 21-132	2021-22	(39,489)	(88,243)	48,754	48,754	39,489
	Winter DG 22-057	2022-23	10,974	(48,754)	5,487	54,241	(5,487)
	Winter 2023-24 projected	2023-24	6,221	(54,241)	3,110	57,351	(3,110)
5	Total Costs						(\$3,110)
6	Included in Winter 2023-2024 filing						(\$3,110)

REDACTED
SCHEDULE P
Winter 2023/2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION
INCREMENTAL COSTS CNG VS. SPOT PROPANE WINTER 2022-2023
ACTUALS

	Actual Nov-22	Actual Dec-22	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Total
1 CNG PURCHASES							
2 CNG Volumes (Schedule C Reconciliation)							
3							
4 CNG Costs (Schedule C Reconciliation)							
5 Total Cost per Actual CNG Costs (Schedule C Reconciliation)							
6							
7 CNG Cost Per Therm Actual							
8							
9 SPOT PROPANE PURCHASES							
10 Spot Propane Volumes (Schedule C Reconciliation)							
11							
12 Total Costs Spot Propane							
13 Total Cost Spot Propane							
14							
15 Spot Propane Cost Per Therm Actual	\$1.3923	\$1.2834	\$1.6239	\$1.4625	\$1.3474	\$1.3020	\$1.3615
16							
17							
18							
19 CNG Volumes							
20							
21 Price difference CNG vs Spot Propane							
22 Adj. for rounding							
23 Incremental Costs Propane							
24							
25							
26							
						Allowed Recoverable Costs \$	(5,487)

APPENDIX 1
Winter 2023/2024 COG Filing

MONT BELVIEU PROPANE FUTURES - 9/6/23 CLOSE

MONT BELVIEU LDH PROPANE (OPIS) FUTURES - SETTLEMENTS

TRADE DATE Wednesday, 06 Sep 2023 ▾

FINAL DATA ●

Last Updated 06 Sep 2023 10:32:00 PM CT

ESTIMATED VOLUME TOTALS 11,004						PRIOR DAY OPEN INTEREST TOTALS 1	
MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	EST. VOLUME
SEP 23	-	-	-	-	+.00153	.73368	0
OCT 23	-	-	-	-	+.00166	.74333	3,206
NOV 23	-	-	-	-	+.00167	.75167	614
DEC 23	-	-	-	-	+.00167	.75625	904
JAN 24	-	-	-	-	+.00375	.77125	1,044
FEB 24	-	-	-	-	+.00417	.77167	1,034
MAR 24	-	-	-	-	+.00375	.75708	719
APR 24	-	-	-	-	+.00208	.74083	379
MAY 24	-	-	-	-	+.00208	.73625	379
JUN 24	-	-	-	-	+.00208	.73708	379

APPENDIX 2
Winter 2023/2024 COG Filing

ENTERPRISE TE PRODUCTS PIPELINE FERC TARIFF 54.69.0 - EFFECTIVE 7/1/23

RATES (In Cents-per-bbl.)			
[I] All rates are increased.			
ITEM NO. 135		Non-Incentive Rates for Propane	
	Origin		
Destination	Floreffe Junction (Allegheny Co., PA)	Mont Belvieu (Chambers Co., TX)	Tappan Lake (Harrison Co., OH), Todhunter (Butler Co., OH) & Follansbee (Brooke Co., West Virginia)
Coshocton (Coshocton Co., OH)	--	902.11	--
Dexter (Stoddard Co., MO)	--	428.64	--
Du Bois (Clearfield Co., PA)	484.55 (1)(2)	1001.48 (1)	484.55 (1)
Fontaine (Green Co., AR)	--	402.69	--
Greensburg (Westmoreland Co., PA)	484.55 (1)(2)	945.14 (1)	484.55 (1)
Harford Mills (Cortland Co., NY)	680.85 (1)	1068.17 (1)	708.84 (1)
Lebanon (Boone Co., IN)	--	505.51 (4)	--
Oneonta (Otsego Co., NY)	737.02	1154.20 (1)	760.80 (1)
Princeton (Gibson Co., IN)	--	550.27	--
Schaefferstown (Lebanon Co., PA)	714.43 (2)	1079.65	704.97
Selkirk (Albany Co., NY)	799.65	1227.25 (1)	801.73 (1)
Seymour (Jackson Co., IN)	--	480.36	--
Sinking Spring (Berks Co., PA)	714.43 (2)	1079.65	704.97
Todhunter Truck Terminal (Butler Co., OH)	--	808.34	--
Watkins Glen (Schuyler Co., NY)	655.34 (1)	1013.55 (1)	685.11 (1)
West Memphis (Crittenden Co., AR)	--	428.64 (4)	--
Monee (Will Co., IL)		1818.33 (7)	

Northern Gas Transport, Inc.
Box 106
Lyndonville, VT 05851-0106
1-800-648-1075
FAX: 802-626-5039

August 1, 2023

To: All Customers

Re: Fuel Surcharge Notice

As of Monday July 31, 2023, the Department of Energy New England average price per gallon of diesel fuel was \$4.161. All deliveries invoiced from Sunday, August 6, 2023 through Saturday, August 12, 2023 will be line item assessed at 20% fuel surcharge. Thank you and should you have any questions, please contact Renee Young at 1-800-648-1075 extension 221.

Best Regards,

Renee Young
Billing Specialist

APPENDIX 3B
Winter 2023/2024 COG Filing

Northern Gas Transport Inc. - Selkirk to Keene

Gallons	Base Rate	Base Charge	Fuel Surcharge Rate	Surcharge	Total Charge	Total Rate Per Gallon
9,200	\$0.1030	\$947.60	1.00%	\$9.48	\$957.08	\$0.1040
9,200	\$0.1030	\$947.60	2.00%	\$18.95	\$966.55	\$0.1051
9,200	\$0.1030	\$947.60	2.50%	\$23.69	\$971.29	\$0.1056
9,200	\$0.1030	\$947.60	3.00%	\$28.43	\$976.03	\$0.1061
9,200	\$0.1030	\$947.60	3.50%	\$33.17	\$980.77	\$0.1066
9,200	\$0.1030	\$947.60	4.00%	\$37.90	\$985.50	\$0.1071
9,200	\$0.1030	\$947.60	4.50%	\$42.64	\$990.24	\$0.1076
9,200	\$0.1030	\$947.60	5.00%	\$47.38	\$994.98	\$0.1082
9,200	\$0.1030	\$947.60	5.50%	\$52.12	\$999.72	\$0.1087
9,200	\$0.1030	\$947.60	6.00%	\$56.86	\$1,004.46	\$0.1092
9,200	\$0.1030	\$947.60	6.50%	\$61.59	\$1,009.19	\$0.1097
9,200	\$0.1030	\$947.60	7.00%	\$66.33	\$1,013.93	\$0.1102
9,200	\$0.1030	\$947.60	7.50%	\$71.07	\$1,018.67	\$0.1107
9,200	\$0.1030	\$947.60	8.00%	\$75.81	\$1,023.41	\$0.1112
9,200	\$0.1030	\$947.60	8.50%	\$80.55	\$1,028.15	\$0.1118
9,200	\$0.1030	\$947.60	9.00%	\$85.28	\$1,032.88	\$0.1123
9,200	\$0.1030	\$947.60	9.50%	\$90.02	\$1,037.62	\$0.1128
9,200	\$0.1030	\$947.60	10.00%	\$94.76	\$1,042.36	\$0.1133
9,200	\$0.1030	\$947.60	10.50%	\$99.50	\$1,047.10	\$0.1138
9,200	\$0.1030	\$947.60	11.00%	\$104.24	\$1,051.84	\$0.1143
9,200	\$0.1030	\$947.60	11.50%	\$108.97	\$1,056.57	\$0.1148
9,200	\$0.1030	\$947.60	12.00%	\$113.71	\$1,061.31	\$0.1154
9,200	\$0.1030	\$947.60	12.50%	\$118.45	\$1,066.05	\$0.1159
9,200	\$0.1030	\$947.60	13.00%	\$123.19	\$1,070.79	\$0.1164
9,200	\$0.1030	\$947.60	13.50%	\$127.93	\$1,075.53	\$0.1169
9,200	\$0.1030	\$947.60	14.00%	\$132.66	\$1,080.26	\$0.1174
9,200	\$0.1030	\$947.60	14.50%	\$137.40	\$1,085.00	\$0.1179
9,200	\$0.1030	\$947.60	15.00%	\$142.14	\$1,089.74	\$0.1185
9,200	\$0.1030	\$947.60	15.50%	\$146.88	\$1,094.48	\$0.1190
9,200	\$0.1030	\$947.60	16.00%	\$151.62	\$1,099.22	\$0.1195
9,200	\$0.1030	\$947.60	16.50%	\$156.35	\$1,103.95	\$0.1200
9,200	\$0.1030	\$947.60	17.00%	\$161.09	\$1,108.69	\$0.1205
9,200	\$0.1030	\$947.60	17.50%	\$165.83	\$1,113.43	\$0.1210
9,200	\$0.1030	\$947.60	18.00%	\$170.57	\$1,118.17	\$0.1215
9,200	\$0.1030	\$947.60	18.50%	\$175.31	\$1,122.91	\$0.1221
9,200	\$0.1030	\$947.60	19.00%	\$180.04	\$1,127.64	\$0.1226
9,200	\$0.1030	\$947.60	19.50%	\$184.78	\$1,132.38	\$0.1231
9,200	\$0.1030	\$947.60	20.00%	\$189.52	\$1,137.12	\$0.1236
9,200	\$0.1030	\$947.60	20.50%	\$194.26	\$1,141.86	\$0.1241
9,200	\$0.1030	\$947.60	21.00%	\$199.00	\$1,146.60	\$0.1246
9,200	\$0.1030	\$947.60	21.50%	\$203.73	\$1,151.33	\$0.1251
9,200	\$0.1030	\$947.60	22.00%	\$208.47	\$1,156.07	\$0.1257
9,200	\$0.1030	\$947.60	22.50%	\$213.21	\$1,160.81	\$0.1262
9,200	\$0.1030	\$947.60	23.00%	\$217.95	\$1,165.55	\$0.1267
9,200	\$0.1030	\$947.60	23.50%	\$222.69	\$1,170.29	\$0.1272
9,200	\$0.1030	\$947.60	24.00%	\$227.42	\$1,175.02	\$0.1277
9,200	\$0.1030	\$947.60	24.50%	\$232.16	\$1,179.76	\$0.1282
9,200	\$0.1030	\$947.60	25.00%	\$236.90	\$1,184.50	\$0.1288
9,200	\$0.1030	\$947.60	25.50%	\$241.64	\$1,189.24	\$0.1293
9,200	\$0.1030	\$947.60	26.00%	\$246.38	\$1,193.98	\$0.1298
9,200	\$0.1030	\$947.60	26.50%	\$251.11	\$1,198.71	\$0.1303
9,200	\$0.1030	\$947.60	27.00%	\$255.85	\$1,203.45	\$0.1308
9,200	\$0.1030	\$947.60	27.50%	\$260.59	\$1,208.19	\$0.1313
9,200	\$0.1030	\$947.60	28.00%	\$265.33	\$1,212.93	\$0.1318
9,200	\$0.1030	\$947.60	28.50%	\$270.07	\$1,217.67	\$0.1324
9,200	\$0.1030	\$947.60	29.00%	\$274.80	\$1,222.40	\$0.1329
9,200	\$0.1030	\$947.60	29.50%	\$279.54	\$1,227.14	\$0.1334
9,200	\$0.1030	\$947.60	30.00%	\$284.28	\$1,231.88	\$0.1339
9,200	\$0.1030	\$947.60	30.50%	\$289.02	\$1,236.62	\$0.1344
9,200	\$0.1030	\$947.60	31.00%	\$293.76	\$1,241.36	\$0.1349
9,200	\$0.1030	\$947.60	31.50%	\$298.49	\$1,246.09	\$0.1354
9,200	\$0.1030	\$947.60	32.00%	\$303.23	\$1,250.83	\$0.1360
9,200	\$0.1030	\$947.60	32.50%	\$307.97	\$1,255.57	\$0.1365
9,200	\$0.1030	\$947.60	33.00%	\$312.71	\$1,260.31	\$0.1370
9,200	\$0.1030	\$947.60	33.50%	\$317.45	\$1,265.05	\$0.1375
9,200	\$0.1030	\$947.60	34.00%	\$322.18	\$1,269.78	\$0.1380
9,200	\$0.1030	\$947.60	34.50%	\$326.92	\$1,274.52	\$0.1385
9,200	\$0.1030	\$947.60	35.00%	\$331.66	\$1,279.26	\$0.1391
9,200	\$0.1030	\$947.60	35.50%	\$336.40	\$1,284.00	\$0.1396
9,200	\$0.1030	\$947.60	36.00%	\$341.14	\$1,288.74	\$0.1401
9,200	\$0.1030	\$947.60	36.50%	\$345.87	\$1,293.47	\$0.1406
9,200	\$0.1030	\$947.60	37.00%	\$350.61	\$1,298.21	\$0.1411
9,200	\$0.1030	\$947.60	37.50%	\$355.35	\$1,302.95	\$0.1416
9,200	\$0.1030	\$947.60	38.00%	\$360.09	\$1,307.69	\$0.1421
9,200	\$0.1030	\$947.60	38.50%	\$364.83	\$1,312.43	\$0.1427
9,200	\$0.1030	\$947.60	39.00%	\$369.56	\$1,317.16	\$0.1432
9,200	\$0.1030	\$947.60	39.50%	\$374.30	\$1,321.90	\$0.1437
9,200	\$0.1030	\$947.60	40.00%	\$379.04	\$1,326.64	\$0.1442